WRITTEN STATEMENT OF

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ON

CARBON MONOXIDE POISONING PREVENTION

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Subcommittee Hearing

Subcommittee on Commerce, Trade and Protection

House Energy and Commerce Committee

Good afternoon, I am John Andres, Director of Engineering for Kidde's Residential and Commercial Division located in Mebane, North Carolina. Thank you, Chairman Rush and members of the Committee, for the opportunity to contribute to the discussion on the prevention of carbon monoxide (CO) poisoning in the United States. Kidde Residential and Commercial Division is part of UTC Fire & Security, a subsidiary of United Technologies Corporation. We are a proud leader in manufacturing life-saving residential carbon monoxide alarms and other fire safety devices. We are committed to leading the industry in product safety and strict compliance to industry standards.

Kidde supports enactment of H. 1796, "The Residential Carbon Monoxide Safety Act." The Centers for Disease Control and Prevention reports that each year, unintentional CO poisoning kills more than 400 Americans, requires 20,000 more to seek emergency medical attention, and causes more than 4,000 hospitalizations. H.1796 is a strong first step toward preventing these tragedies. I commend Congressman Matheson for his leadership in elevating this critical public health and safety issue.

H.1796 would focus much-needed federal attention and resources toward ending accidental carbon monoxide poisoning. The bill's provisions to create a grant program supporting residential CO alarm laws are especially important. However, for the purposes of today's hearing, my comments will focus on describing the carbon monoxide hazard and how CO alarms operate to provide warning, and on explaining why it is necessary to establish mandatory federal product safety standards, as laid out in H.1796.

Known as the "silent killer," carbon monoxide is a by-product of incomplete combustion. Potential sources are gas-burning appliances such as a furnace, water heater, stove, and grill, as well as other fuel-burning devices like fireplaces and engines. If such devices are improperly installed or malfunction, carbon monoxide can build up inside a home. Carbon monoxide easily mixes with the air and can quickly reach dangerous levels. Because one cannot see, taste or smell carbon monoxide, the only safe way to detect the gas is to install working CO alarms. Kidde and fire safety experts such as the National Fire Protection Association recommend placing CO alarms outside each bedroom and on every level of an occupied dwelling.

When inhaled, carbon monoxide bonds with the blood's hemoglobin to form carboxyhemoglobin, which then deprives cells of oxygen. A CO alarm works by measuring CO concentrations over time to ensure that an alarm will sound before a person's blood level reaches 10-percent carboxyhemoglobin. Below this level, a normally healthy adult will not experience symptoms of CO poisoning.

Consumers must have confidence that a properly installed and maintained CO alarm will warn them about the presence of dangerous CO levels, and avoid nuisance alarms. This need for accuracy and reliability is the cornerstone of Underwriters Laboratories (UL) 2034, the independent, third-party standard to which U.S. carbon monoxide alarms are voluntarily tested and listed.

UL 2034 is an American National Standards Institute – or ANSI - accredited standard that combines input from medical experts, approval bodies like UL, government agencies such as the Consumer Product Safety Commission (CPSC), the National Fire Protection Association, users and manufacturers in order to create a robust standard of performance.

First published in 1992, UL 2034 has gone through several revisions, each of which is based on years of field test data intended to progressively strengthen the standard. Kidde supports this standard because it specifically tests the product design for electrical safety, mechanical robustness and the accuracy of CO detection over time and in different environmental conditions. UL 2034 is continually reviewed by a standards technical panel in order to keep pace with technological advances and past lessons learned. This revision process has led to the creation of CO sensing technology that is more advanced, stable, and reliable than past generations.

To date, 24 states have enacted laws requiring CO alarms in residential dwellings, and while most mandate that CO alarms meet UL 2034, there is no uniform requirement. More states will likely adopt similar legislation. In order to avoid confusion among regulators, consumers, and the industry, state lawmakers need a consistent standard to define what constitutes an "approved" alarm. Without such a reference, conflicting regulations arise that counter one of the CPSC's objectives, which is "to develop uniform safety standards for consumer products and to minimize conflicting state and local regulations."

In closing, each week we hear of families whose lives have been saved through the use of CO alarms. Having a CO alarm does make the difference between life and death. Consumers must have confidence that their CO alarm will work reliably and accurately. A federal standard would provide an umbrella of protection for all consumers in the US, as well as increase awareness and save lives.

Again, I thank committee members for their consideration of H.1796, and for raising awareness about CO dangers. Congressman Matheson, we look forward to working with you to pass this important legislation expeditiously. Thank you again for the opportunity to contribute to this discussion, and I will be glad to answer any questions.